

June 7, 2012

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: *Ex Parte Submission, PS Docket No. 12-74*

Dear Ms. Dortch:

Alcatel-Lucent supports the position of the Utilities Telecom Council that the Recommended Minimum Technical Requirements to Ensure Nationwide Interoperability for the Nationwide Public Safety Broadband Network (NPSBN) should promote opportunities for sharing the NPSBN (infrastructure and spectrum) between public safety, utilities and other critical infrastructure industries (CII). Alcatel-Lucent further agrees that such interoperability requirements should not preclude public safety from negotiating priority access that would provide reliable communications for both utilities and public safety, including during emergencies.

The Commission has long recognized the benefits of broadening the user base for the public safety spectrum, and in particular potential partnerships between public safety users and secondary users, such as utilities.¹ The new legislation makes clear that the NPSBN may enter into partnerships with a broad range of entities, and utilities are uniquely situated to partner with public safety. Perhaps of greatest significance, to a greater extent than other potential commercial partners, utilities have needs similar to first responders for mission critical communications and a focus on geographic coverage (as opposed to population coverage). Further, utilities have extensive infrastructure that could be leveraged by the First Responder Network Authority to deploy the NPSBN, including hardened radio sites, fiber networks, microwave networks, and the like.

The Technical Advisory Board for First Responder Interoperability adopted a number of requirements that will both facilitate infrastructure and spectrum sharing between public safety, utilities and CII and provide reliable communications for both utilities and public

¹ *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, Amendment of Part 90 of the Commission's Rules*, 26 FCC Rcd 733, 770 ¶ 135 (2011) (recognizing that allowing secondary users is an important policy goal "in light of otherwise uncertain nature of the funding need to ensure nationwide build out of the public safety broadband network").

safety. For example, recommended requirement [9] specifies adherence to LTE's standard network sharing features specified in 3GPP TS 23.251. If utilities and CII users share band 14 spectrum and use public land mobile identifiers (PLMN IDs) different from the PLMN ID(s) used by public safety, this provision will ensure that network sharing for public private partnerships between utilities and other CII users and public safety are supported in an interoperable manner across the NPSBN. Furthermore, these network sharing features also support the enforcement of network sharing Service Level Agreements to help ensure critical utility and CII applications have access to minimum bandwidth levels during periods of heavy network usage. Such Service Level Agreements will help ensure that Supervisory Control and Data Acquisition (SCADA), applications essential to grid operations and the control of power during a number of emergency response scenarios, is supportable during times of network congestion. Similar service level agreements can also be enforced if utilities, CII users and public safety share a common PLMN ID using the quality of service (QoS) mechanisms defined in 3GPP TS 23.203. Adherence to QoS mechanisms necessary to support this functionality is covered by recommended requirements [31] – [34].

Additionally, recommended requirement [35] specifies adherence to 3GPP TS 22.011 for the assignment of access classes. Access classes help ensure high priority users have access to an LTE network during periods of extreme overload. TS 22.011 reserves 1 of LTE's 5 high priority access classes explicitly for devices used by public utilities. Section 4.5.2.3 of the Interoperability Board's report discusses handovers between Band 14 networks with different PLMN IDs, scenarios that may arise when utilities and other CII share spectrum and/or infrastructure with public safety.

For these reasons, we urge the Commission to include in the recommended minimum technical specifications such requirements that would facilitate sharing of spectrum between public safety and utilities and allow public safety the flexibility to enter into mutually beneficial business arrangements that will best attract utility partners, including with respect to priority access.

Please contact the undersigned with any questions in connection with this submission.

Respectfully submitted,

/s/

Kenneth C. Budka
Vice Chair, Technical Advisory Board for First
Responder Interoperability

Senior Director
Advanced Mission-Critical Communications
Bell Labs Chief Technology Office